

ABSTRACT OF THE DISCLOSURE

[036] The present invention relates to the discovery of a novel endophytic fungus, *Muscodor vitigenus*, from the liana, *Paullinia paullinioides*. This fungus produces naphthalene under certain cultural conditions that has chromatographic and mass spectral properties that are identical to authentic naphthalene. In a preferred embodiment, the naphthalene in the gas phase of *M. vitigenus* is useful in the repellency of unwanted insect pests. The unique biological activity of the novel endophyte suggests a wide range of potential practical applications, particularly in the area of insect repellents, insecticides, antimicrobials, anthelmintics and vermicides.